IN THE SPECIFICATION:

Please amend the specification by amending paragraphs [006] through [014] as follows:

[006] Figure 1A shows a gel electrophoresis of certain mechanically fragmented genomic DNA. CEPH 1347-2 gDNA, 100 ng/μL in 1x TE, pH 7.4 was mechanically sheared. 1 μg/lane was subsequently loaded onto an 0.5% agarose gel containing 1x Tris-Borate-EDTA, pH 8.

[007] Figure 1B shows a gel electrophoresis of intact (I) and sheared (S) DNA that was boiled for different lengths of time, and DNAse I treated (D) DNA, as discussed in Example 1. CEPH 1347-2 gDNA, 100 ng/μL in 1x TE, pH 7.4 was mechanically sheared, boiled for the indicated times, or treated with DNAse I under standard conditions. 1 μg/lane was subsequently loaded onto an 0.5% agarose gel containing 1x Tris-Borate-EDTA, pH 8.

[008] Figure 2 shows the effects of genomic DNA concentration and boiling duration on two different sources of genomic DNA, as discussed in Example 1. CEPH 1347-2 or NA-17212 gDNA (33.5-360 ng/μL in 1x TE, pH 8) was boiled for the indicated times, then 0.5 μg of the boiled sample was loaded onto 0.8% agarose E-gel and subjected to electrophoresis.

[009] Figure 3 shows the effects of boiling for different lengths of time on 4 different genomic DNA sources, as discussed in Example 1. CEPH 1347-2 gDNA or gDNA derived from 3 different blood donors, 100 ng/μL in 1x TE, pH 8 was boiled, and

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

0.5 μg/sample was subsequently loaded onto 0.8% agarose E-gels and subjected to electrophoresis.

[010] Figure 4 compares the assay of intact gDNA with boiled DNA as discussed in Example 1.

[011] Figures 5A and 5B show that boiled gDNA can be probed for specific SNPs by OLA-PCR. OLA-PCR reactions containing 10 ng/μL boiled CEPH 1347-2 or NA-12565 gDNA were probed for the presence of 40 specific SNPs. OLA-PCR products were detected by 4% agarose gel electrophoresis (Figure 5A) or by capillary electrophoresis (Figure 5B). Figure 5A shows a gel electrophoresis of OLA/PCR products generated from different fragmented genomic DNA sources, as discussed in Example 1.

[012] Figure 5B shows capillary electrophoresis of OLA/PCR products generated from different fragmented genomic DNA sources, as discussed in Example 1.

[013] Figure 6 shows the results of hybridization of PE-27 planar arrays to OLA/PCR products generated from genomic DNA fragmented by DNAse I treatment, boiling for 15 minutes, and boiling for 30 minutes, as discussed in Example 1. OLA-PCR products generated using boiled (15 min. or 30 min. as specified) CEPH 1347-2 gDNA (Fig. 6C and Fig. 6F) appear to bind similarly to PE-27 planar arrays as DNAse I-digested CEPH 1347-2 gDNA (Fig. 6A and Fig. 6D). Similar average log R/G ratios (Figs. 6A, 6B, and 6C) indicate similar genotype separation, while the slight changes in intensity was not reproducible (N= 2 experiments).

[014] Figure 7 shows the results of hybridization of PE-27 planar arrays to OLA/PCR products generated from intact genomic DNA, gDNA fragmented by boiling

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

15 minutes, and gDNA fragmented by boiling 60 minutes, as discussed in Example 1. OLA-PCR products generated using blood gDNA which was either unboiled (Fig. 7A and Fig. 7D) or boiled for 15 (Fig. 7B and Fig. 7E), or 60 (Fig. 7C and Fig. 7F) min. bound to PE-27 planar arrays, indicating that either intact or low molecular weight fragments (~100-800 bp) of gDNA can be used to screen SNPs. However, the genotype separation data (Figs. 7A, 7B, and 7C) obtained with the longer boiling time appeared to be a slightly more variable (see arrows), and the fluorescence intensity (Figs 7D, 7E, and 7F) of some SNPs appeared to be reduced.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

IN THE FIGURES:

Subject to the approval of the Examiner, please replace the figures as originally filed (7 sheets of figures, Figures 1 through 7) with the Replacement Sheets filed herewith (17 sheets of figures, Figures 1 through 7).

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HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com